

I CLAIM:

1. A urethral sling introducer for inserting only through a pair of vaginal incisions equal lengths of polypropylene sling tape in a sub-urethral fashion to control female incontinence wherein, the sling introducer comprises  
an instrument unit including an elongated curved hollow tubular member provided with a conical tip wherein, the upper end of the hollow tubular member is provided with a contoured capture aperture and is further dimensioned to slidably receive a capture piston  
a handle unit including a hollow handle member adapted to receive a supply of saline fluid wherein, the hollow handle member is in open communication with said hollow tubular member; and,  
means for moving said capture piston into and out of an obstructing relationship relative to said contoured capture aperture.
2. The sling introducer as in claim 1; wherein, said capture piston is hollow.
3. The sling introducer as in claim 2; wherein, the capture piston has an upper end that is chamfered to allow saline fluid to pass through said capture aperture.
4. The sling introducer as in claim 1; wherein, said conical tip is provided with at least one fluid port.
5. The sling introducer as in claim 3; wherein, said conical tip is provided with at least one fluid port.
6. The sling introducer as in claim 5; wherein, said at least one fluid port is in open fluid communication with the hollow capture piston member.
7. The sling introducer as in claim 1; wherein, said means for moving said capture piston relative to the capture aperture comprises at least in part

a locking piston slidably disposed within the hollow handle member; and,

an elongated spring element having opposite ends connected to said capture piston and said locking piston.

8. The sling introducer as in claim 5; wherein, said means for moving said capture piston relative to the capture aperture comprises at least in part  
a locking piston slidably disposed within the hollow handle member; and,  
an elongated spring element having opposite ends connected to said capture piston and said locking piston.
9. The sling introducer as in claim 1; wherein, said capture aperture has an enlarged upper portion and an elongated narrow lower portion.
10. The sling introducer as in claim 5; wherein, said capture aperture has an enlarged upper portion and an elongated narrow lower portion.
11. The sling introducer as in claim 7; wherein, said capture aperture has an enlarged upper portion and an elongated narrow lower portion.
12. The sling introducer as in claim 11; wherein, said means for moving the capture piston relative to the capture aperture further comprises  
a cap element movably disposed on the lower end of the handle member wherein, the cap element is disposed in a surrounding relationship relative to said locking piston.
13. The sling introducer as in claim 12; wherein, said cap element is adapted to movably engage a portion of the locking piston.

14. A method of installing a sub-urethral sling tape only through a pair of vaginal incisions without piercing the abdominal wall including the steps of
- a) captively engaging one end of the sling tape in the upper end of an elongated hollow tubular member having a conical tip and disposed on a hollow handle member connected to a saline solution supply
  - b) inserting said conical tip through one of the vaginal incisions and threading the conical tip between the bladder and symphysis while introducing saline solution through the hollow tubular member
  - c) detecting the approach of the conical tip proximate to the abdominal wall
  - d) disengaging the captive end of the sling tape from the hollow tubular member; and,
  - e) retracting the hollow tubular member from the first vaginal incision.
15. The method as in claim 14; further comprising the steps of:
- f) repeating steps a) through e) with respect to the second vaginal incision.
16. The method as in claim 14; further including the intermediate steps of:
- g) disposing the sling tape in a transparent sheath provided with different colored numerical indicia
  - h) retracting the sheath slightly prior to captively engaging the unsheathed portion of the sling tape as in step a)
  - i) snugging the sheath against the captive end of the tape.

17. The method as in claim 16; including the further steps of
- j) retracting the transparent tape after step c) and prior to step d) until the upper end of the sheath passes out of the vaginal incision on the left side.
  - k) noting the numerical value adjacent the free end of the sling tape on the lower portion of the colored indicia on the sheath
  - l) severing the sheath and the sling tape at the corresponding numerical value on the differently colored upper portion of the sheath; and,
  - m) removing the remaining portion of the sheath from the uncut portion of the sling tape.
18. The method as in claim 17; further comprising the steps of:
- f) repeating steps a) through e) with respect to the insertion through the incision on the right side of the urethra.